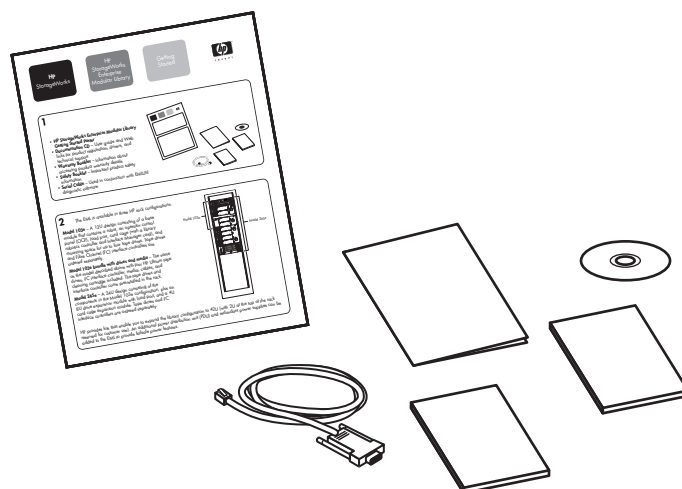


1

- **HP StorageWorks Enterprise Modular Library Getting Started Poster**
- **Documentation CD** – User guide, Web links for product registration, drivers, component animations, and technical support information
- **Warranty Booklet** – Information about accessing product warranty details
- **Safety Booklet** – Important product safety information
- **Serial Cable**



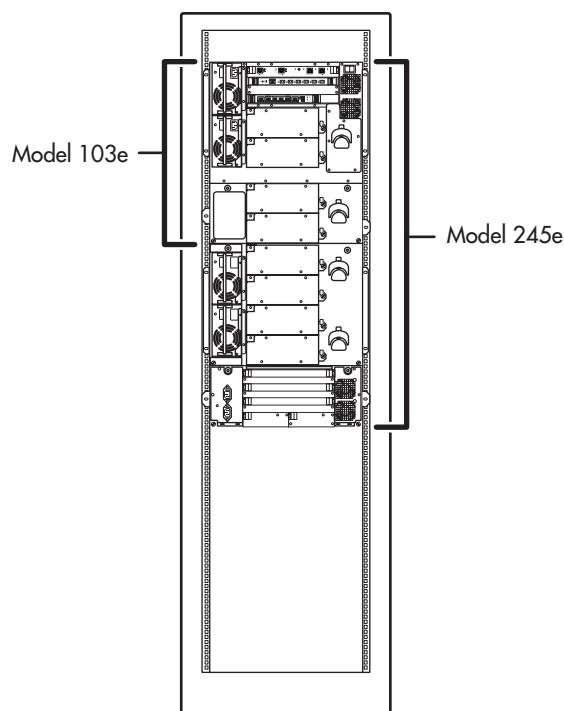
2

The EML is available in three HP rack configurations:

Model 103e – A 12U design consisting of a base module that contains a robot, an operator control panel (OCP), load port, card cage (with a library robotics controller and Interface Manager card), and mounting space for up to four tape drives. Tape drives and Fibre Channel (FC) interface controllers are ordered separately.

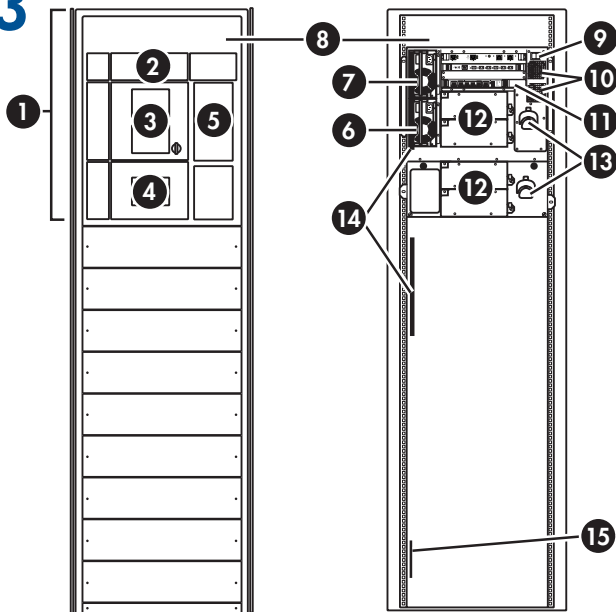
Model 103e bundle with drives and media – The same as the model described above with four HP Ultrium tape drives, FC interface controller, media, cables, and cleaning cartridge included. The tape drives and interface controller come preinstalled in the rack.

Model 245e – A 24U design consisting of the components in the Model 103e configuration, plus an 8U drive expansion module with load port, and a 4U card cage expansion module. Tape drives and FC interface controllers are ordered separately.



HP provides kits that enable you to expand the library configuration to 42U (with 2U at the top of the rack reserved for customer use). An additional power distribution unit (PDU) and redundant power supplies can be added to the EML to provide failsafe power features.

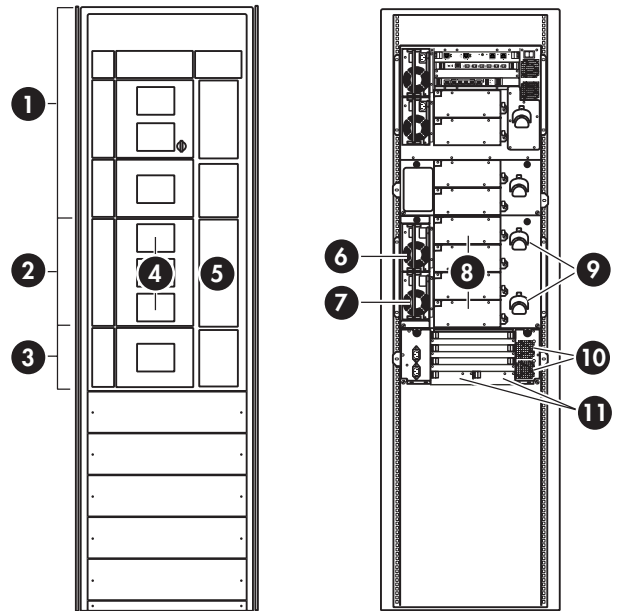
3



Front and rear view Model 103e

1. Base module
2. Robotics unit (parked)
3. Viewing window
4. Operator control panel
5. Load port (5-cartridge capacity)
6. Redundant module power supply (optional)
7. Module primary power supply
8. Customer reserved space (2U)
9. Library main power switch
10. Library fans
11. Base module card cage
12. Tape drives
13. Cable management features
14. Extension bars (power strips)
15. Power distribution unit

4



Front and rear view Model 245e

1. See Model 103e figure
2. Tape drive expansion module
3. Card cage expansion module
4. Viewing window
5. Load port (10-cartridge capacity)
6. Module primary power supply
7. Redundant module power supply (optional)
8. Tape drives
9. Cable management features
10. Card cage module fans
11. Redundant card cage power supplies

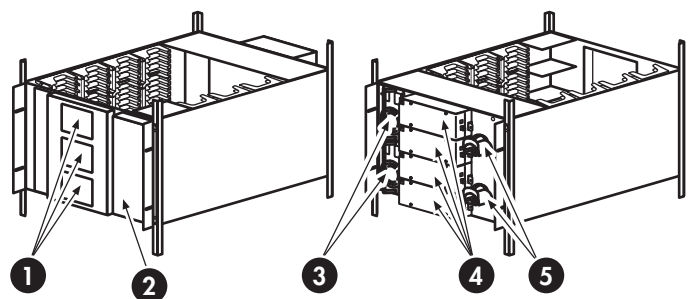
5

Expansion Module: Tape Drive

The tape drive expansion module is an 8U chassis containing 94 LTO slots.

The tape drive expansion module has three windows on the front for viewing the robotic motion inside the library. To the right is a 10-cartridge configurable load port that holds two 5-cartridge magazines.

On the back, the module contains one primary power supply with a slot provided for another optional redundant power supply. Refer to the *HP StorageWorks EML User Guide* for additional information and installation procedures.



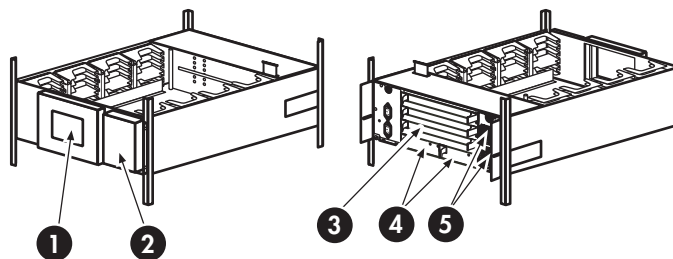
1. Viewing windows
2. 10-cartridge capacity load port
3. Power supplies (redundant power supply shown)
4. Tape drives
5. Cable management features

6

Expansion Module: Card Cage

The card cage expansion module is a 4U chassis that contains 48 permanent LTO slots and space for additional interface controllers. This module must be located directly below the 8U tape drive expansion module in a 24U library configuration.

The front of the chassis has one window for viewing robotic motion inside the library. On the back, six PCI card slots are available for additional e2400-FC 2G interface controllers to expand the library tape drive capacity. Refer to the *HP StorageWorks EML User Guide* for additional information and installation procedures.



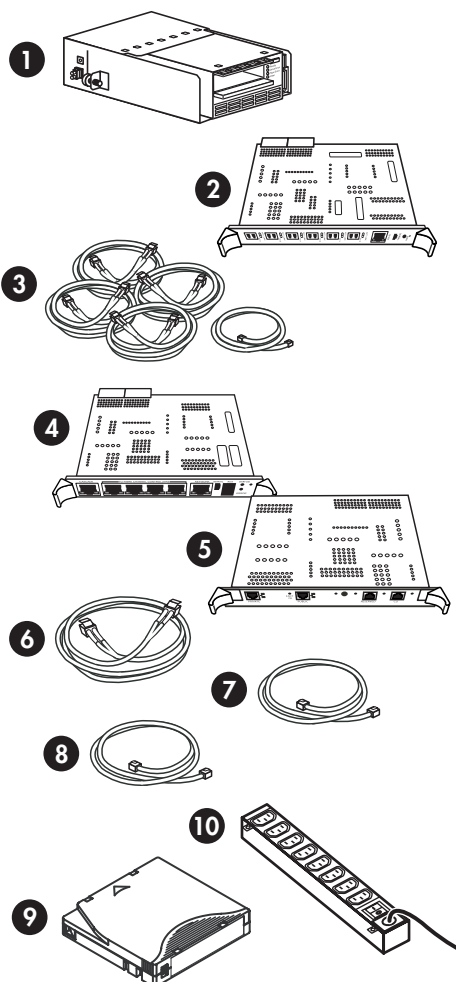
1. Viewing window
2. Blank facade
3. Card slot
4. Redundant power supply
5. Fans

7

Component Installation



NOTE: Refer to each component installation poster for specific installation information. You may also refer to the *HP StorageWorks EML User Guide* for additional information and installation procedures.



Verify that you have the following equipment and accessories available before beginning the installation process. For a native Fibre Channel (FC) environment, you need the following:

1. One or more Ultrium tape drives (these come preinstalled in one configuration)
2. One HP StorageWorks e2400-FC 2G interface controller for every four tape drives (comes preinstalled in one configuration)
3. Four FC drive cables and one Ethernet cable for each e2400-FC 2G interface controller



NOTE: Only use Ethernet cables provided with the library. If the library uses a LAN extension connector, plug into it, and not directly to a card.

4. One Interface Manager card (preinstalled in EML)
5. One library robotics controller (preinstalled in EML)
6. One FC cable for each interface controller connection to a host or switch (not included)
7. One Ethernet cable for an Interface Manager card connection to the management station
8. One Ethernet cable for an Interface Manager card connection to the library robotics controller (preinstalled)
9. Tape cartridges for appropriate tape drives
10. Power source

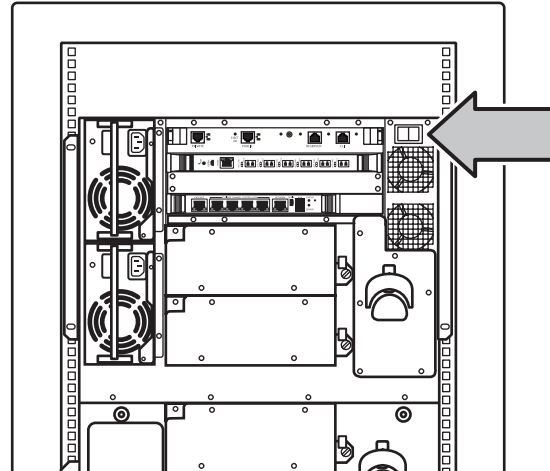
8

Powering on the Library

After all components have been installed and cabled, power on the library.

- Close and latch the library front door.
- Open the back doors of the library rack and press the main power switch to the **1** (On) position.
- Close the library rack back doors.

The library requires several minutes to power on. Nothing displays on the operator control panel (OCP) for the first few minutes of this process.



9

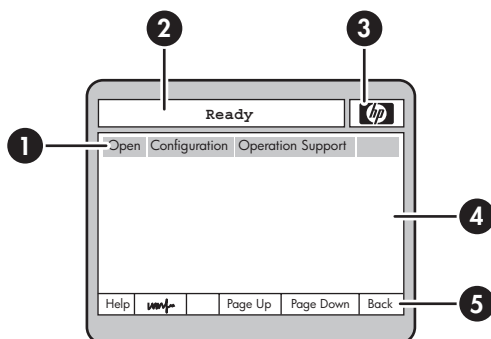
Configuration through the Operator Control Panel (OCP)

The OCP is used to configure library settings before first use. After the library is powered up, configure these settings as described in the *HP StorageWorks EML User Guide*.

The first screen displayed after library initialization is the Home screen. After the library status is determined (ready, warning, or error), that status is displayed on the Home screen, and you can touch the screen to access other functional and operational screens.



After touching the Home screen, you are presented with a screen containing a status bar to the left of an HP logo, two rows of tabs, and an area for detailed screen information in the center.



1. Top-level menu tabs
2. Status bar
3. HP Logo
4. Detailed screen information area
5. Navigation tabs

OCP icons



Critical error—A condition when a component failure makes the library inoperable.



Warning—A condition when a component failure degrades library activity, but the library is still operable.



Ready—The library is online and ready for operation.



Thumbtack out—Indicates that the screen is eligible to be selected for display after a period of inactivity.



Thumbtack in—Indicates the screen has been selected for display after a period of inactivity. Only one screen at a time can be thumbtacked.



Item selection—Indicates that the item can be selected from a menu list.



Password required—Denotes that a password is required to access this feature.

10

After you install and configure the library, complete the following setup tasks. Refer to the *HP StorageWorks EML User Guide* for more information.



Change Password

The library ships with a null password. Passwords must be set to exactly eight characters consisting of the numbers 0 through 9 and the period character.



Configure Load Ports

This GUI shows the number of installed load ports and enables you to toggle between using each as a load port or for tape slots. Configure it as a Load Port to move tapes in and out of the library. Configure as Slots to increase the number of storage slots in the library. Changing a load port configuration will cause a library reboot.



Change Network Settings

This configures the network settings for the Interface Manager card, which can be set automatically with DHCP (the default), or manually with a static IP address. Use the Address Config: button to toggle between these two options. If you are setting the network addresses manually, touch each address element separately to set the network configuration.



Configure Barcode Reporting Formats

This defines how bar codes are displayed on the OCP and sent to the host. Bar code reporting can be configured as 6 to 8 characters and left or right aligned. If 6 characters with left alignment is chosen, any characters after the six are truncated. With 6 characters and right alignment, only the last six characters are shown with the beginning characters truncated.



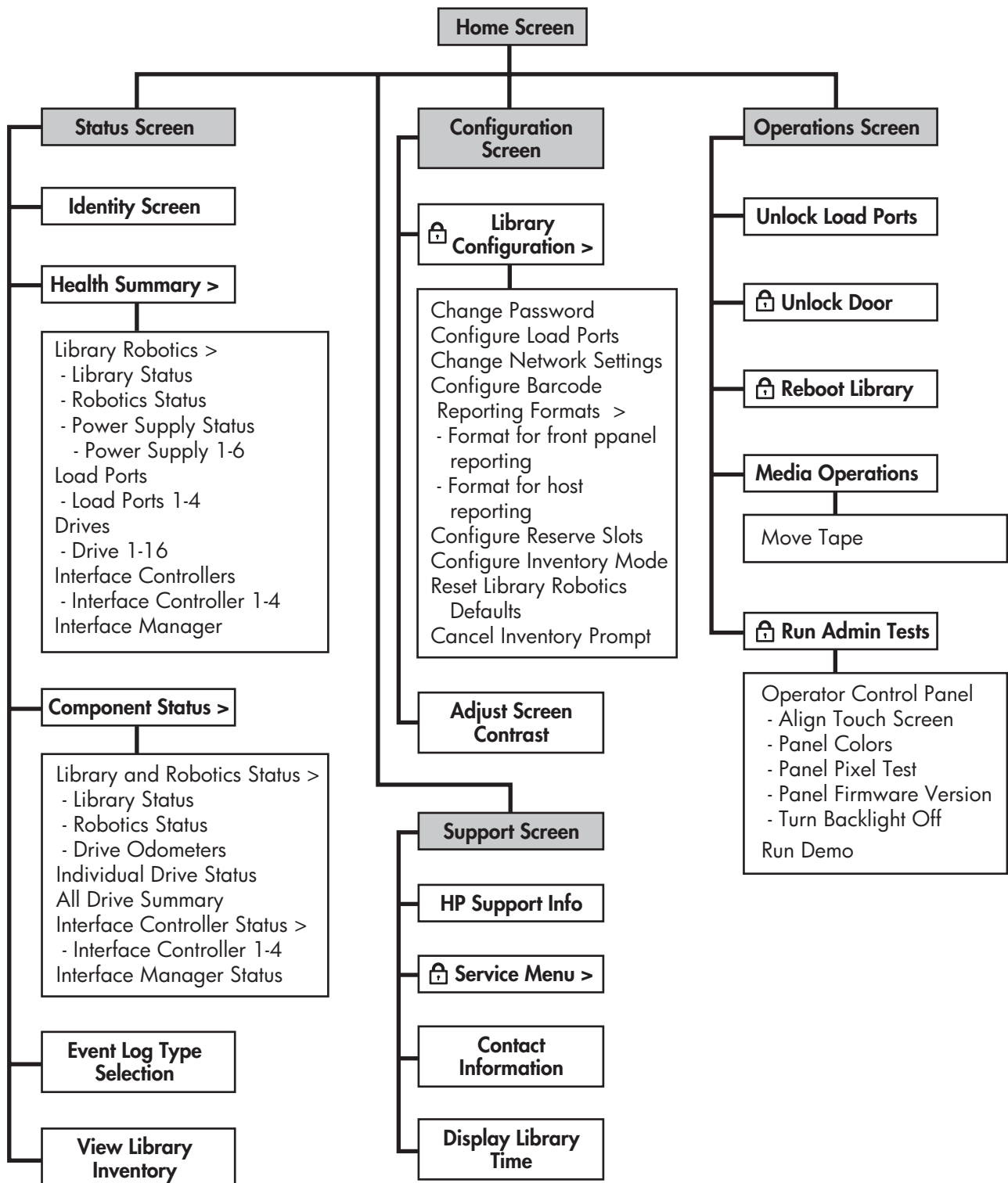
Configure Reserve Slots

Up to nine slots can be reserved for special purposes, such as cleaning tapes. The default is none. Select the number you want to reserve and press Save.



Configure Inventory Mode

This allows you to require bar codes on tape cartridges, or to make them optional. Requiring bar codes significantly improves inventory time.



12

Installing HP StorageWorks Command View TL

1. Find the Command View Media Kit in your library accessory kit.
2. Insert the Command View TL software CD into the CD-ROM drive of the designated management station.
3. If autorun is disabled on the CD-ROM drive, locate and double-click setup.exe on the CD.
4. Follow the instructions on the screen to complete the installation.

If you need to stop Command View TL from running on the management station, use the Services applet that is included with Windows.

To access the Services applet:

1. **Select Start > Settings > Control Panel > Administrative Tools > Services** and locate the *Command View TL* service in the list.
2. Use the Services applet to start and stop services, and to set whether the service is started automatically when the computer is booted.

NOTE: See the Windows online help for more information. See the *HP StorageWorks Interface Manager and Command View TL User Guide* for detailed information on using Command View TL



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Configuring and using HP StorageWorks Command View TL

See the *HP StorageWorks Interface Manager and Command View TL User Guide* for detailed information on Command View TL. This guide is available on the Documentation CD found in the Command View media bundle in your library accessory kit, and is also available at <http://www.hp.com/support/cvtl/>.

Getting help

- HP product information:
<http://www.hp.com/go/storage>
- HP technical support and phone numbers:
<http://www.hp.com/support>
- HP StorageWorks Library and Tape Tools (L&TT) diagnostic software:
<http://www.hp.com/support/tapetools>

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